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PRE-APPEAL BRIEF REQUEST FOR REVIEW	Docket Number (Optional)
	550-318

	Application Number	Filed
	10/079,811	February 22, 2002
	First Named Inventor	
	NIGHTINGALE	
	Art Unit	Examiner
	2128	S. Patel

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
Note: No more than five (5) pages may be provided.

I am the

☐   Applicant/Inventor

☐   Assignee of record of the entire interest. See 37 C.F.R. § 3.71. Statement under 37 C.F.R. § 3.73(b) is enclosed. (Form PTO/SB/96)

☒   Attorney or agent of record   27,393
                                    (Reg. No.)

☐   Attorney or agent acting under 37CFR 1.34.
Registration number if acting under 37 C.F.R. § 1.34 _____

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Signature

Stanley C. Spooner

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Typed or printed name

703-816-4028
Requester's telephone number

June 20, 2006
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.*

☒   *Total of 1 form/s are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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STATEMENT OF ARGUMENTS IN SUPPORT OF
PRE-APPEAL BRIEF REQUEST FOR REVIEW

The following listing of clear errors in the Examiner's rejection and his failure to identify

essential elements necessary for a *prima facie* basis of rejection are responsive to the Final

Rejection mailed March 21, 2006 (Paper No. 079811). While Applicants' arguments will be

directed towards the subject matter of method claim 1, the arguments are similarly applicable to

Applicants' apparatus claim 15 and computer program product claim 16 and therefore

incorporated by reference.

1. The Examiner fails to establish how or where Hollander
teaches Applicants' claimed "(i) modelling" operation of a
software component using a software simulator

Applicants' independent claims require "modelling operation of said software component

using a software simulator." The portion of the Final Rejection entitled "Response to Arguments"

completely ignores this claimed requirement of claims 1, 15 and 16. This indicates that the

Examiner has no response to this argument.

The restatement of the rejection under 35 USC §103 on page 6 of the final rejection (as in

the previous official action) does allege that Hollander is directed to a method of simulating a

system and in item a. suggests that it teaches the claimed "modeling." The Examiner refers to

column 8, lines 39-44 and column 10, lines 51-58 in Hollander as containing such teaching or

suggestion. Neither of the cited portions of the Hollander reference have anything to do with

"modelling operation of said software component using a software simulator."

The column 8 discussion relates to "a report generator module 24 [which] provides textual

and graphical information on the test results" and the column 10 discussion deals with a "co-

verification extension module 174." Since neither of these structures have anything to do with

1086054

NIGHTINGALE et al
Appl. No. 10/079,811
June 20, 2006

Applicants' claimed method step or corresponding structure or logic (in claims 15 and 16),

Hollander simply fails to disclose claimed subject matter and therefore there can be no *prima facie*

case of obviousness.

In fact, a more pertinent portion of the Hollander reference is believed to be at column 10,

lines 24-28, where it is stated that "the user first creates a cycle-accurate model of the hardware

apparatus 172 on which the external software program 168 is to be run." However, this clearly

indicates that the software component is not modeled and instead a real software program is simply

run, albeit on a model of the hardware apparatus.

Because Hollander contains no teaching of "modeling" the operation of a software

component, Hollander does not support a rejection of claims 1, 15 and 16 under 35 USC §103 or

any claims dependent thereon.

**2. The Examiner fails to establish how or where Hollander
teaches Applicants' claimed "(iv) generating" step wherein
"said modelled interaction between said software component
and said hardware component proceeds independently of said
test controller"**

In section (iv) of claim 1, relating to "generating" (and similar sections in independent

claims 15 and 16), it is specified that "wherein said modelled interaction between said software

component and said hardware component proceeds independently of said test controller." The

Examiner addresses this claim requirement in the first paragraph on page 4 of the Final Rejection

"Response to Arguments." He alleges that Hollander discloses the claimed method step and

corresponding structures and logic at column 5, lines 21-24 and column 8, lines 24-32.

The column 5 citation merely suggests that the Hollander invention "can perform any

combination of static and dynamic checks" and that "the test generator module and the checker

can constantly synchronize." While this language may be considered broad enough to cover

- 2 -

NIGHTINGALE et al
Appl. No. 10/079,811
June 20, 2006

Applicant's claimed subject matter, it does not disclose that subject matter and disclosure, not

claim coverage, is the test of obviousness.

The second reference merely identifies that Hollander uses "a checker module 30" and

the checker along with the corresponding generate module 26 are elements that "can constantly

synchronize." A brief reference to Hollander's Figure 1 will indicate that the test generator

module 26 and the checker module 30 are portions of the test controller 22 (unlabeled in Figure

1).

Because the checker and the test generator are part of the test controller, it is impossible

for the modelled interaction "between said software component and said hardware component [to

proceed] **independently** of said test controller" as set out in Applicant's claims (emphasis

added). In fact, Hollander suggests that the only interaction between software and hardware in

the Hollander reference is that which is foreseen to occur at "pre-designated points" in the

software (see Hollander at column 10, lines 43-45).

Thus, Hollander cannot discover the unexpected, which is the whole point of the present

invention. Applicant's claimed interrelationship which proceeds "independently of said test

controller" is a crucial feature of the present invention and allows a more realistic simulation of

the interplay between software and hardware to be performed than was previously possible in

Hollander and other prior art teachings.

Again, because the subject matter of the independent claim "generating" step and

specifically the modelled interaction which proceeds "independently of said test controller" is not

disclosed in the Hollander reference, and therefore the combination of this and other steps in the

method claims, in the apparatus claims and similar logic in the logic claims cannot be obvious in

- 3 -

NIGHTINGALE et al
Appl. No. 10/079,811
June 20, 2006

view of the Hollander reference and therefore any further rejection of claims 1, 15 and 16 (and any claims dependent thereon) is respectfully traversed.

3. The Examiner fails to establish how or where Hollander teaches Applicants' claimed "(vi) modelling" the response of the hardware component wherein software stimulus "is passed to said software simulator by issuing a remote procedure call from said test controller to said software simulator

The Examiner, in apparent admission that the Hollander reference has no disclosure relating to the use of a remote procedure call, cites the Platt reference as teaching Applicants' last "modelling" step in which the software stimulus is "passed to said software simulator by issuing a remote procedure call from said test controller to said software simulator."

While Platt does suggest use of a procedure call, the Examiner ignores the problem that would be faced in applying the Platt solution to the Hollander system. The Examiner does not provide any indication of how one of ordinary skill in the art would be directed to apply remote procedural calls as a communication means in the Hollander reference, in view of the fact that the test controller 166 and the external software 163 (as shown in Figure 5 of Hollander) **exist in entirely separate domains with no apparent communication link** available in order to implement the "remote procedure call" solution disclosed in Applicants' invention.

The Examiner's summary in the "Response to Arguments" portion of the Final Rejection on page 4, second paragraph, merely confirms that remote procedural calls are feasible in both the present invention and in the Platt reference. However, he ignores the well-known problem of how to incorporate such a procedure call disclosed in the Platt reference in the Hollander reference itself. In view of the above, it would be clear to one of ordinary skill in the art that this could not be done, as there is no obvious communication link between the test controller and the external software in order to be able to incorporate the Platt "remote procedure call" procedure.

- 4 -

NIGHTINGALE et al
Appl. No. 10/079,811
June 20, 2006

Thus, again there is no last "modelling" step from Applicants' independent claims disclosed in the Hollander/Platt combination and in fact, due to the Hollander problems noted above, Platt could not be incorporated into the Hollander solution.

SUMMARY

As noted above, the Examiner's Final Rejection ignores the lack of the claimed "modelling operation" set out in item (i) in Applicants' independent claims. This failure alone removes any *prima facie* basis for an obviousness rejection. As noted above, the Final Rejection also does not point to any teaching in the Hollander reference wherein modelled interaction between software components and hardware components proceeds "independently of said test controller." In fact, the cited portion of Hollander has nothing to do with this aspect. The lack of this feature as well in Hollander clearly avoids any obviousness rejection under 35 USC §103. Finally, the lack of the final "modelling" aspect of Applicants' invention in which communication from said test controller to said software simulator proceeds by way of a "remote procedure call," while disclosed in the Platt reference, is not necessarily combinable with Hollander because there is no communication link available. There is no indication as to why one of ordinary skill in the art would think to combine these dissimilar references in this fashion, since there is no means for communication disclosed in the Hollander reference.

As a result of the above, there is simply no support for the rejection of Applicants' independent claims or claims dependent thereon under 35 USC §103. Applicants respectfully request that the Pre-Appeal Panel find the application is allowed on the existing claims and that prosecution on the merits should be closed.

- 5 -